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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BATURAY, ALICIA

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/933,582	TORABI, MOHAMMAD	
	Examiner	Art Unit	
	Alicia Baturay	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10282005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), which was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 October 2005 has been entered.
2. Claims 1-3, 9, 16, and 17 were amended.
3. Claims 20-22 were added.
4. Claims 1-22 are pending in this Office Action.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5, 7, 8, 16, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (U.S. US 6,731,314) and further in view of Chuah et al. (U.S. 6,400,722).

Cheng teaches the invention substantially as claimed including a client computer program providing instructions for the processor to generate a three-dimensional (3D) graphical user interface on a display. Then, the processor generates a metaphorical user object for navigating and interacting in the three dimensions within the environment via navigational and interactional inputs, respectively, from a user. The user object may interact with any or all of the additional user objects in response to the interactional inputs from the user (see Abstract).

7. With respect to claim 1, Cheng teaches a virtual reality system, comprising:

One or more virtual reality environment user equipment (VUE) operative to capture and display virtual reality data (Cheng, Fig. 2, element 8; col. 4, lines 14-15); the core system being operative to access the relatively local VSD, to retrieve respective subscription information of the at least one VUE, if core system is a respective home core system of the at least one VUE (Cheng, col. 19, line 38 – col. 20, line 37) and a and a virtual reality environment episode management entity which is in communication with the at least one virtual reality environment core system and is operative to forward virtual reality data representing an environment to the at least one VUE, thereby facilitating a virtual reality episode (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches where the core system is in communication with at least two virtual reality environment subscriber databases (VSD), one of which has a relatively local location and at least one of which has a relatively remote location (Chuah, col. 10, lines 18-

25); the virtual reality environment core system being in wireless communication with the at least one VUE (Chuah, col. 5, lines 7-9), and to access at least one of the relatively remotely located VSD to retrieve respective subscription information of the at least one VUE (Chuah, col. 10, lines 49-53), if the core system is respective visited virtual reality core system relative to the at least one VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

8. With respect to claim 2, Cheng teaches the invention described in claim 1, including the virtual reality system where the one or more virtual reality environment user equipment is operative to capture the virtual reality data in real-time (Cheng, col. 10, lines 45-47).
9. With respect to claim 3, Cheng teaches the invention described in claim 1, including the virtual reality system where the one or more virtual reality environment user equipment is operative to display the virtual reality data in real-time (Cheng, col. 4, lines 14-15).
10. With respect to claim 5, Cheng teaches the invention described in claim 1, including the virtual reality system where the virtual reality episode is conducted between a plurality of virtual reality environment user equipment (Cheng, col. 4, lines 25-27).

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11. With respect to claim 7, Cheng teaches the invention described in claim 1, including the virtual reality system where one of the at least one virtual reality core systems comprises a virtual reality entity subscription database (Cheng, col. 19, lines 18-43).

12. With respect to claim 8, Cheng teaches the invention described in claim 1, including the virtual reality system where the virtual reality environment episode management entity is located within one of the at least one virtual reality environment core system (Cheng, Fig. 2, element 10).

13. With respect to claim 16, Cheng teaches a virtual reality system that enables the real-time conduction of a virtual reality episode (Cheng, col. 5, lines 39-41), comprising:

At least one virtual reality environment user equipment (VUE) operative to capture and display virtual reality data associated with at least one user (Cheng, Fig. 2, element 8; col. 4, lines 14-15); at least one virtual reality environment core system (VCS) (Cheng, Fig. 2, element 10; col. 10, lines 35-38), where the at least one VCS has a pre-existing relationship with one of the at least one VUE and the at least one user (Cheng, col. 16, lines 48-49); and a virtual reality environment episode management entity (VEME), in communication with the at least one user and the at least one VCS, where the VEME forwards real-time virtual reality data representative of an actual physical environment to the at least one VUE associated with the at least one user (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches a plurality of virtual reality environment access systems (VAS), where each respective VAS of the plurality provides wireless connectivity for respective ones of the at least one VUE, where the respective VAS relays messages between the VUE and the at least one VCS; and where responsibility for providing connectivity is handed off from a first respective VCS to a second respective VCS if the respective ones of the at least one VUE move out of a first geographic region served by the first respective VCS and into a second geographic region that is served by the second respective VCS (Chuah, col. 10, lines 18-25); through wireless connectivity services of the respective VAS currently serving the at least one VUE of the at least one user based on VUE or user location and/or mobile link information maintained by the VEME (Chuah, col. 10, lines 18-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

14. With respect to claim 20, Cheung teaches a system that is operative to provide virtual reality data services to a subscriber using virtual reality environment user equipment (VUE), the system comprising:

A virtual reality environment episode management entity (VEME) that is operative to manage, coordinate, synchronize and maintain event information between participants and information sources associated with a virtual reality episode; a virtual reality environment control entity (VECE) that is operative to control virtual reality episodes associated with the

subscriber or the VUE (Cheng col. 17, lines 54-62) by accessing a local virtual reality environment subscriber database (VDS) if the VECE is a home VECE of the subscriber or VUE (Cheng, col. 19, line 38 – col. 20, line 37).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches accessing a remote virtual reality environment subscriber database (VDS) (Chuah, col. 10, lines 49-53), if the VECE is a visited VECE relative to the subscriber or VUE (Chuah, col. 10, lines 12-25), to determine subscription information associated with the subscriber and/or the VUE, a providing system access and/or services to the VUE and relaying messages between the VUE and the VEME according to the subscriber information and the mobile links, and a virtual reality environment access system (VAS), where the VAS of the provides wireless connectivity for the VUE if the VUE is located in a respective geographic region served by the VAS , where the respective VAS relays messages between the VUE and the VECE; where the responsibility for providing connectivity is handed off from the VECE if the VUE moves out of a first geographic region served by the first VECE (Chuah, col. 10, lines 18-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

15. With respect to claim 21, Cheng teaches the invention described in claim 20, including the system comprising:

At least one additional virtual reality environment VECE that is operative to control virtual reality episodes associated with at least one additional subscriber using at least one additional VUE (Cheng, Fig. 2, element 10; col. 17, lines 54-62) by accessing a local virtual reality environment subscriber database (VDS) if the VECE is a home VECE of the at least one additional subscriber or VUE (Cheng, col. 19, line 38 – col. 20, line 37), to determine at least one additional set of subscription information associated with the at least one additional subscriber and/or the VUE, and providing system access and/or services to the at least one additional VUE (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches accessing a remote virtual reality environment subscriber database (VDS), if the VECE is a visited VECE relative to the at least one additional subscriber or VUE, and relaying messages between the at least one additional VUE and the VEME according to the subscriber information and the mobile links, and at least one additional virtual reality environment access systems (VAS) associated with the at least one additional VECE, where each respective additional VAS provides wireless connectivity for the at least one additional VUE if the at least one additional VUE is located in a respective geographic region served by the respective VAS, where the respective VAS relays messages between the at least one additional VUE and a respective one of the at least one additional VECE; and where responsibility for providing connectivity is handed off from a first respective additional VECE to a second respective additional VECE if the at least one additional VUE moves out of a first additional geographic region served by the respective

first additional VAS and into a second additional geographic region that is served by a second respective additional VAS (Chuah, col. 10, lines 18-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

16. With respect to claim 22, Cheng teaches the invention described in claim 21, including the system comprising:

At least one additional virtual reality environment VECE that is operative to control virtual reality episodes associated with at least one additional subscriber using at least one additional VUE (Cheng, Fig. 2, element 10; col. 17, lines 54-62) by accessing a local virtual reality environment subscriber database (VDS) if the VECE is a home VECE of the at least one additional subscriber or VUE (Cheng, col. 19, line 38 – col. 20, line 37), to determine at least one additional set of subscription information associated with the at least one additional subscriber and/or the VUE, and providing system access and/or services to the at least one additional VUE (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches a gateway entity that is operative to provide boundary entity services that facilitate a communication of messages between the VECE and the at least one additional VECE, the boundary entity services including at least one of firewall services hiding underlying network structure, facilitating the flow and routing of virtual reality

episode control signals, and translating signals between elements of the system (Chuah, col. 10, lines 26-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

17. Claims 4, 6, 9-15, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng and Chuah and further in view of French et al. (U.S. 6,308,565).

18. With respect to claim 4, Cheng teaches the invention described in claim 1, including a virtual reality system, comprising:

One or more virtual reality environment user equipment (VUE) operative to capture and display virtual reality data (Cheng, Fig. 2, element 8; col. 4, lines 14-15); the core system being operative to access the relatively local VSD, to retrieve respective subscription information of the at least one VUE, if core system is a respective home core system of the at least one VUE (Cheng, col. 19, line 38 – col. 20, line 37) and a and a virtual reality environment episode management entity which is in communication with the at least one virtual reality environment core system and is operative to forward virtual reality data representing an environment to the at least one VUE, thereby facilitating a virtual reality episode (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches where the core system is in communication with at least two virtual reality environment subscriber databases (VSD), one of which has a relatively local location and at least one of which has a relatively remote location (Chuah, col. 10, lines 18-25); the virtual reality environment core system being in wireless communication with the at least one VUE (Chuah, col. 5, lines 7-9), and to access at least one of the relatively remotely located VSD to retrieve respective subscription information of the at least one VUE (Chuah, col. 10, lines 49-53), if the core system is respective visited virtual reality core system relative to the at least one VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

Cheng teaches a virtual reality system, comprising:

One or more virtual reality environment user equipment (VUE) operative to capture and display virtual reality data (Cheng, Fig. 2, element 8; col. 4, lines 14-15); the core system being operative to access the relatively local VSD, to retrieve respective subscription information of the at least one VUE, if core system is a respective home core system of the at least one VUE (Cheng, col. 19, line 38 – col. 20, line 37) and a and a virtual reality environment episode management entity which is in communication with the at least one virtual reality environment core system and is operative to forward virtual reality data representing an environment to the at least one VUE, thereby facilitating a virtual reality episode (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches where the core system is in communication with at least two virtual reality environment subscriber databases (VSD), one of which has a relatively local location and at least one of which has a relatively remote location (Chuah, col. 10, lines 18-25); the virtual reality environment core system being in wireless communication with the at least one VUE (Chuah, col. 5, lines 7-9), and to access at least one of the relatively remotely located VSD to retrieve respective subscription information of the at least one VUE (Chuah, col. 10, lines 49-53), if the core system is respective visited virtual reality core system relative to the at least one VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

The combination of Cheng and Chuah does not explicitly teach the rendering of a physical environment.

However, French teaches the environment as an actual physical environment (French, Fig. 2; col. 9, lines 6-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to model physical locations within a virtual reality system in order to create an accurate simulation of real world events (French, col. 2, lines 2-3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng and Chuah in view of French in order to enable the use of virtual

reality user equipment. One would be motivated to do so in order to model physical locations within a virtual reality system in order to create an accurate simulation of real world events.

19. With respect to claim 6, Cheng teaches the invention described in claim 1, including a virtual reality system, comprising:

One or more virtual reality environment user equipment (VUE) operative to capture and display virtual reality data (Cheng, Fig. 2, element 8; col. 4, lines 14-15); the core system being operative to access the relatively local VSD, to retrieve respective subscription information of the at least one VUE, if core system is a respective home core system of the at least one VUE (Cheng, col. 19, line 38 – col. 20, line 37) and a and a virtual reality environment episode management entity which is in communication with the at least one virtual reality environment core system and is operative to forward virtual reality data representing an environment to the at least one VUE, thereby facilitating a virtual reality episode (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches where the core system is in communication with at least two virtual reality environment subscriber databases (VSD), one of which has a relatively local location and at least one of which has a relatively remote location (Chuah, col. 10, lines 18-25); the virtual reality environment core system being in wireless communication with the at least one VUE (Chuah, col. 5, lines 7-9), and to access at least one of the relatively remotely located VSD to retrieve respective subscription information of the at least one VUE (Chuah,

col. 10, lines 49-53), if the core system is respective visited virtual reality core system relative to the at least one VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

Cheng teaches a virtual reality system, comprising:

One or more virtual reality environment user equipment (VUE) operative to capture and display virtual reality data (Cheng, Fig. 2, element 8; col. 4, lines 14-15); the core system being operative to access the relatively local VSD, to retrieve respective subscription information of the at least one VUE, if core system is a respective home core system of the at least one VUE (Cheng, col. 19, line 38 – col. 20, line 37) and a and a virtual reality environment episode management entity which is in communication with the at least one virtual reality environment core system and is operative to forward virtual reality data representing an environment to the at least one VUE, thereby facilitating a virtual reality episode (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches where the core system is in communication with at least two virtual reality environment subscriber databases (VSD), one of which has a relatively local location and at least one of which has a relatively remote location (Chuah, col. 10, lines 18-25); the virtual reality environment core system being in wireless communication with the at least one VUE (Chuah, col. 5, lines 7-9), and to access at least one of the relatively remotely

located VSD to retrieve respective subscription information of the at least one VUE (Chuah, col. 10, lines 49-53), if the core system is respective visited virtual reality core system relative to the at least one VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

The combination of Cheng and Chuah does not explicitly teach the rendering of a physical environment.

However, French teaches a virtual reality environment access system, where the virtual reality environment access system facilitates the wireless communication of the at least one virtual reality environment user equipment with the at least one virtual reality environment core system (French, col. 8, lines 54-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng and Chuah in view of French in order to enable the use of virtual reality user equipment. One would be motivated to do so in order to model physical locations within a virtual reality system in order to create an accurate simulation of real world events.

20. With respect to claim 9, Cheng teaches a method of enabling the real-time conduction of a real-time virtual reality episode (Cheng, col. 5, lines 39-41), comprising:

Receiving a request for establishing a virtual reality episode (VRE) from VRE user equipment (VUE) (Cheng, col. 17, lines 54-62); accessing a relatively local virtual reality

environment subscriber database (VSD) to retrieve subscription information associated with the VUE if an entity receiving the request is a respective home virtual reality core system of the VUE (Cheng, col. 19, line 38 – col. 20, line 37); receiving real time virtual reality data at a virtual reality environment (VRE) episode management entity (Cheng, col. 10, lines 35-39), determining, at a VRE episode management entity, that the virtual reality data is associated with the requested virtual reality episode (Cheng, col. 16, lines 50-51); and forwarding, based on the accessed subscription information, at least a portion of the virtual reality data to the VUE, (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches accessing a relatively remote VSD to retrieve respective subscription information of the VUE (Chuah, col. 10, lines 49-53) if the entity receiving the request is a visited virtual reality core system relative to the VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

Cheng teaches a method of enabling the real-time conduction of a real-time virtual reality episode (Cheng, col. 5, lines 39-41), comprising:

Receiving a request for establishing a virtual reality episode (VRE) from VRE user equipment (VUE) (Cheng, col. 17, lines 54-62); accessing a relatively local virtual reality environment subscriber database (VSD) to retrieve subscription information associated with

the VUE if an entity receiving the request is a respective home virtual reality core system of the VUE (Cheng, col. 19, line 38 – col. 20, line 37); receiving real time virtual reality data at a virtual reality environment (VRE) episode management entity (Cheng, col. 10, lines 35-39), determining, at a VRE episode management entity, that the virtual reality data is associated with the requested virtual reality episode (Cheng, col. 16, lines 50-51); and forwarding, based on the accessed subscription information, at least a portion of the virtual reality data to the VUE, (Cheng, Fig. 2, element 10; col. 17, lines 54-62).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches accessing a relatively remote VSD to retrieve respective subscription information of the VUE (Chuah, col. 10, lines 49-53) if the entity receiving the request is a visited virtual reality core system relative to the VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

The combination of Cheng and Chuah does not explicitly teach the rendering of a physical environment.

However, French teaches where the virtual reality data is representative of an actual physical environment (French, Fig. 2; col. 9, lines 6-9); where the VRE user equipment is in wireless communication with the VRE episode management entity (French, col. 8, lines 54-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng and Chuah in view of French in order to enable the use of virtual reality user equipment. One would be motivated to do so in order to model physical locations within a virtual reality system in order to create an accurate simulation of real world events.

21. With respect to claim 10, Cheng teaches the invention described in claim 9, including further comprising capturing in real time virtual reality data representative of an actual physical environment prior to receiving the real time virtual reality data at a virtual reality environment (VRE) episode management entity (Cheng, col. 18, lines 25-26).

22. With respect to claim 11, Cheng teaches the invention described in claim 10, including where capturing in real time virtual reality data comprises capturing real time audio associated with the actual physical environment (Cheng, col. 16, lines 50-51).

23. With respect to claim 12, Cheng teaches the invention described in claim 10, including further comprising capturing in real time virtual reality data representative of an actual physical environment prior to receiving the real time virtual reality data at a virtual reality environment (VRE) episode management entity (Cheng, col. 18, lines 25-26).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches accessing a relatively remote VSD to retrieve respective subscription information of the VUE (Chuah, col. 10, lines 49-53) if the entity receiving the

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request is a visited virtual reality core system relative to the VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

Cheng teaches capturing in real time virtual reality data representative of an actual physical environment prior to receiving the real time virtual reality data at a virtual reality environment (VRE) episode management entity (Cheng, col. 18, lines 25-26).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches accessing a relatively remote VSD to retrieve respective subscription information of the VUE (Chuah, col. 10, lines 49-53) if the entity receiving the request is a visited virtual reality core system relative to the VUE (Chuah, col. 10, lines 12-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

The combination of Cheng and Chuah does not explicitly teach the rendering of a physical environment.

However, French teaches where capturing in real time virtual reality data comprises capturing in real time virtual reality data representative of an actual physical environment located geographically distant from the VRE user equipment (French, col. 9, lines 4-22).

24. With respect to claim 13, Cheng teaches the invention described in claim 9, including further comprising identifying the VRE user equipment as participating in the virtual reality episode prior to forwarding at least a portion of the virtual reality data to the VRE user equipment (Cheng, col. 16, lines 48-49).
25. With respect to claim 14, Cheng teaches the invention described in claim 9, including further comprising determining the location of the VRE user equipment prior to forwarding at least a portion of the virtual reality data to the VRE user equipment (Cheng, col. 17, lines 63-67).
26. With respect to claim 15, Cheng teaches the invention described in claim 9, including where determining the location of the VRE user equipment comprises querying a database for the location of the VRE user equipment (Cheng, col. 18, line 55- col. 19, line 2).
27. With respect to claim 17, Cheng teaches transmitting the captured virtual reality data to a first virtual reality environment access systems (VAS) (Cheng, Fig. 2, element 8; col. 4, lines 14-15); communicating the captured virtual reality data to intervening network elements including a second VAS (Cheng, Fig. 2, element 10; col. 17, lines 54-62); accessing a

relatively local virtual reality environment subscriber database (VSD) to retrieve subscription information associated with a second user participating in the virtual reality episode, if an entity in communication with the second user is a respective home virtual reality core system of the second user (Cheng, col. 18, line 52 – col. 19, line 11).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches wirelessly accessing a relatively remote VSD to retrieve respective subscription information of the second user if the entity in communication with the second user is a visited virtual reality core system relative to the second user (Chuah, col. 10, lines 49-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

Cheng teaches transmitting the captured virtual reality data to a first virtual reality environment access systems (VAS) (Cheng, Fig. 2, element 8; col. 4, lines 14-15); communicating the captured virtual reality data to intervening network elements including a second VAS (Cheng, Fig. 2, element 10; col. 17, lines 54-62); accessing a relatively local virtual reality environment subscriber database (VSD) to retrieve subscription information associated with a second user participating in the virtual reality episode, if an entity in communication with the second user is a respective home virtual reality core system of the second user (Cheng, col. 18, line 52 – col. 19, line 11).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches wirelessly accessing a relatively remote VSD to retrieve respective subscription information of the second user if the entity in communication with the second user is a visited virtual reality core system relative to the second user (Chuah, col. 10, lines 49-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

The combination of Cheng and Chuah does not explicitly teach the rendering of a physical environment.

However, French teaches a method of participating in a real-time virtual reality episode, comprising; providing a virtual reality environment (VRE) user equipment, where the VRE user equipment captures virtual reality data representing an actual physical environment associated with a first user (French, Fig. 2; col. 9, lines 6-9) and wirelessly transmitting (French, col. 8, lines 54-58) the virtual reality data from the second VAS to the second user as authorized by the subscription information associated with the second user, where the second VAS and the second user are geographically remote from the first user (French, Fig. 20; col. 33, lines 9-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng and Chuah in view of French in order to enable the use of virtual reality user equipment. One would be motivated to do so in order to model physical locations within a virtual reality system in order to create an accurate simulation of real world events.

28. With respect to claim 18, Cheng the invention described in claim 17, including transmitting the captured virtual reality data to a first virtual reality environment access systems (VAS) (Cheng, Fig. 2, element 8; col. 4, lines 14-15); communicating the captured virtual reality data to intervening network elements including a second VAS (Cheng, Fig. 2, element 10; col. 17, lines 54-62); accessing a relatively local virtual reality environment subscriber database (VSD) to retrieve subscription information associated with a second user participating in the virtual reality episode, if an entity in communication with the second user is a respective home virtual reality core system of the second user (Cheng, col. 18, line 52 – col. 19, line 11).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches wirelessly accessing a relatively remote VSD to retrieve respective subscription information of the second user if the entity in communication with the second user is a visited virtual reality core system relative to the second user (Chuah, col. 10, lines 49-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

Cheng teaches transmitting the captured virtual reality data to a first virtual reality environment access systems (VAS) (Cheng, Fig. 2, element 8; col. 4, lines 14-15); communicating the captured virtual reality data to intervening network elements including a second VAS (Cheng, Fig. 2, element 10; col. 17, lines 54-62); accessing a relatively local

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virtual reality environment subscriber database (VSD) to retrieve subscription information associated with a second user participating in the virtual reality episode, if an entity in communication with the second user is a respective home virtual reality core system of the second user (Cheng, col. 18, line 52 – col. 19, line 11).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches wirelessly accessing a relatively remote VSD to retrieve respective subscription information of the second user if the entity in communication with the second user is a visited virtual reality core system relative to the second user (Chuah, col. 10, lines 49-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

The combination of Cheng and Chuah does not explicitly teach the rendering of a physical environment.

However, French teaches receiving, from the second user, data representing one or more actions performed by the second user (French, col. 12, lines 6-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng and Chuah in view of French in order to enable the use of virtual reality user equipment. One would be motivated to do so in order to model physical locations within a virtual reality system in order to create an accurate simulation of real world events.

29. With respect to claim 19, Cheng the invention described in claim 17, including transmitting the captured virtual reality data to a first virtual reality environment access systems (VAS) (Cheng, Fig. 2, element 8; col. 4, lines 14-15); communicating the captured virtual reality data to intervening network elements including a second VAS (Cheng, Fig. 2, element 10; col. 17, lines 54-62); accessing a relatively local virtual reality environment subscriber database (VSD) to retrieve subscription information associated with a second user participating in the virtual reality episode, if an entity in communication with the second user is a respective home virtual reality core system of the second user (Cheng, col. 18, line 52 – col. 19, line 11).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches wirelessly accessing a relatively remote VSD to retrieve respective subscription information of the second user if the entity in communication with the second user is a visited virtual reality core system relative to the second user (Chuah, col. 10, lines 49-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

Cheng teaches transmitting the captured virtual reality data to a first virtual reality environment access systems (VAS) (Cheng, Fig. 2, element 8; col. 4, lines 14-15); communicating the captured virtual reality data to intervening network elements including a second VAS (Cheng, Fig. 2, element 10; col. 17, lines 54-62); accessing a relatively local

virtual reality environment subscriber database (VSD) to retrieve subscription information associated with a second user participating in the virtual reality episode, if an entity in communication with the second user is a respective home virtual reality core system of the second user (Cheng, col. 18, line 52 – col. 19, line 11).

Cheng does not explicitly teach the use of local and remote network locations.

However, Chuah teaches wirelessly accessing a relatively remote VSD to retrieve respective subscription information of the second user if the entity in communication with the second user is a visited virtual reality core system relative to the second user (Chuah, col. 10, lines 49-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng in view of Chuah in order to enable the use of local and remote network locations. One would be motivated to do so in order to allow an end system that subscribes to a home network to operate within a foreign network.

The combination of Cheng and Chuah does not explicitly teach the rendering of a physical environment.

However, French teaches where wirelessly transmitting occurs automatically after the VRE user equipment captures the virtual reality data (French, col. 8, lines 54-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng and Chuah in view of French in order to enable the use of virtual reality user equipment. One would be motivated to do so in order to model physical locations within a virtual reality system in order to create an accurate simulation of real world events.

Response to Arguments

30. Applicant's arguments filed 28 October 2005 have been fully considered, but they are not persuasive for the reasons set forth below.

31. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Baturay whose telephone number is (571) 272-3981. The examiner can normally be reached at 7:30am - 5pm, Monday - Thursday, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alicia Baturay
December 23, 2005


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER